Amendments to the Claims:

Please amend claims 1, 3, 7, and 9 as indicated in the Listing of Claims.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended): A recombinant DNA molecule comprising:

(a) at least one first regulatory sequence which confers expression in endothelial cells *in vivo*, wherein said first regulatory sequence is selected from the group consisting of

(i) a DNA sequence comprising a nucleotide sequence as given in SEQ ID NO: 1;

(ii) a DNA sequence comprising a nucleotide sequence of SEQ ID NO: 1 from nucleotide 8260 to nucleotide 10560, from nucleotide 8336 to nucleotide 10608 and/or from nucleotide 10094 to nucleotide 10608; and

(iii) a DNA sequence comprising a fragment of a nucleotide sequence of ~~(i) or (ii)~~ SEQ ID NO: 1, wherein the fragment confers endothelial cell-specific expression; and

(b) operatively linked thereto a heterologous DNA sequence.

2. (Original): The recombinant DNA molecule of claim 1, wherein said first regulatory sequence comprises a GATA-binding site, an AP-1 binding site, an SP1 binding site, an NFκB binding site, a STAT binding site, a Scl/tal-1 binding site, an Ets-1 binding site, a PEA3 consensus sequence or any combination(s) thereof

3. (Currently Amended) The recombinant DNA molecule of claim 1 or 2, wherein ~~said~~ the first regulatory sequence is a DNA sequence comprising a fragment of a nucleotide sequence from nucleotide 8260 to nucleotide 10560 of SEQ ID NO:1, from nucleotide 8336 to

nucleotide 10608 of SEQ ID NO:1, and/or from nucleotide 10094 to nucleotide 10608 of SEQ ID NO:1, wherein the fragment confers endothelial cell-specific expression

~~selected from the group consisting of~~

~~(a) a DNA sequence comprising a nucleotide sequence as given in SEQ ID NO: 1;~~

~~(b) a DNA sequence comprising a nucleotide sequence of SEQ ID NO: 1 from nucleotide 8260 to nucleotide 10560, from nucleotide 8336 to nucleotide 10608 and/or from nucleotide 10094 to nucleotide 10608; and~~

~~(c) a DNA sequence comprising a fragment of a nucleotide sequence of any one of (a) or (b) that confers expression in endothelial cells~~.

4. (Previously Presented): The recombinant DNA molecule of any one of claims 1 to 2, wherein said heterologous DNA sequence is operatively linked to further regulatory sequences.

5. (Original): The recombinant DNA molecule of claim 4, wherein said further regulatory sequence is a promoter.

6. (Previously Presented): The recombinant DNA molecule of claim 4, wherein said further regulatory sequence is a 3'-untranslated region.

7. (Currently Amended): The recombinant DNA molecule of claim 5, wherein said promoter is a promoter of a hypoxia inducible ~~genes~~ gene, ~~genes~~ a gene encoding a growth ~~factors~~ factor or its ~~receptors~~ receptor or a glycolytic ~~enzymes~~ enzyme.

8. (Original): The recombinant DNA molecule of claim 7, wherein said growth factor is VEGF, PDGF or Fibroblast growth factor.

9. (Currently Amended): The recombinant DNA molecule of claim 5, wherein said promoter comprises a DNA sequence selected from the group consisting of

(a) a DNA sequence comprising the nucleotide sequence as given in SEQ ID NO: 1 from nucleotide 6036 to nucleotide 6959;

(b) a DNA sequence comprising the nucleotide sequence of the human Flk-1/KDR promoter; and

(c) a DNA sequence comprising a fragment of a nucleotide sequence of any one of ~~(a) or (b)~~ nucleotide 6036 to nucleotide 6959 of SEQ ID NO:1 or the nucleotide sequence of the human Flk-1/KDR promoter, wherein the fragment confers endothelial cell-specific expression.

10. (Previously Presented): The recombinant DNA molecule of any one of claims 1 to 2, wherein at least one of said DNA sequences is of human or murine origin.

11. (Previously Presented): The recombinant DNA molecule of any one of claims 1 to 2, wherein said heterologous DNA sequence being operatively linked to said regulatory sequences is located 5' to said first regulatory sequence.

12. (Canceled)

13. (Previously Presented): The recombinant DNA molecule of claim 42, wherein said protein is selected from the group consisting of Vascular Endothelial Growth Factor (VEGF), Hypoxia Inducible Factors (HIF), HIF-Related Factor (HRF), tissue plasminogen activator, p21 cell cycle inhibitor, nitric oxide synthase, interferon-γ, atrial natriuretic polypeptide, monocyte chemotactic proteins, luciferase, green fluorescent protein and lacZ.

Claims 14 –16 (Canceled)

17. (Previously Presented): A vector comprising a recombinant DNA molecule of any one of claims 1 to 2.

18. The vector of claim 17, which is an expression vector and/or a targeting vector.

19. (Previously amended) The vector of claim 17, further comprising a gene capable of expressing HIF-2α.

20. (Previously amended) An isolated cell transformed with a DNA molecule of any one of claims 1 to 2.

21. (Previously amended) The isolated cell of claim 20, which is a prokaryotic or eukaryotic cell.

22. (Previously amended) The isolated cell of claim 20, which is an endothelial cell.

23. (Previously amended) The isolated cell of claim 20, further comprising a recombinant DNA molecule or vector containing a gene capable of expressing HIF-2α.

Claims 24-41 (Canceled)

42. (Previously Presented): The recombinant DNA molecule of any one of claims 1 to 2, wherein said heterologous DNA sequence encodes a peptide, protein, sense RNA, or ribozyme.

43. (Previously Presented): The recombinant DNA molecule of claim 1, wherein the first regulatory sequence confers endothelium-specific expression *in vivo* of the heterologous DNA sequence.

44. (Previously Presented): An isolated cell transformed with the vector of claim 17.